

WHAT IS CLAIMED IS:

1. A safety switch, in particular for thermal protection of an electrical apparatus, comprising a container (1) inside which means (2) for activation of said switch is housed, said means comprising a command key (3) and a pair (4, 5) of contact carriers, movable relative to each other, each of them being connected with a terminal of its own of an electric circuit, at least one of said contact carriers (4) being susceptible of oscillation around an oscillation axis (O-O) between two positions, an open position at which said contact carriers are separated from each other and respectively a closed position, at which said contact carriers are in mutual contact, each of said positions being imposed by a corresponding position of said command key, said switch being characterized in that said activation means (2) comprises a device (6) responsive to temperature variations in the environment to be controlled, adapted to act on the electric supply circuit of said apparatus depending on the perceived heat level and carrying out a single action on said circuit, the possibility of reuse of the device after each action being bound to the intervention of an operator.

2. The safety switch as claimed in claim 1, wherein said device (6) comprises an element (61) that is alternately and elastically movable between an active position and a passive position, of non interference and interference respectively with at least one of said activation means (3, 4 and 5), said element (61) being held in said active position by locking means (65) responsive to temperature variations, adapted to free said element (61) taking it to a passive position and locking it to said position, by effect of a predetermined temperature variation, said element (61) in said passive position locking said activation means (3 and/or 4 and/or 5) in one of said open or closed positions of said

contact carriers.

3. The safety switch as claimed in claim 2, wherein said element (61) comprises a tubular case (62) rigidly connected with said container, inside which a hollow rod 5 (63) is inserted which is freely slideable in both ways between a contracted position and an extracted position, in said cavity being contained a spring (64) adapted to cause an at least partial extraction of said rod from said case towards said activation means.

10 4. The safety switch as claimed in claim 2, wherein said locking means (65) comprises a thermocouple (66) rigidly connected with said case and a stop pawl (68) associated with said thermocouple and adapted to be inserted into a corresponding notch (69) formed in the 15 side surface of said rod, when said rod is in said contracted position.

5. The safety switch as claimed in claim 4, wherein said notch (69) comprises a continuous annular throat formed in said side surface.

20 6. The safety switch as claimed in claim 4, wherein said thermocouple (66) has an elongated lamelliform shape integral with said case at one end and extended along the side surface of said rod, the opposite end of the laminar portion (67) being bent at an angle against said surface 25 so as to form said stop pawl (68).

7. The safety switch as claimed in claim 3, inside which a command key (2) is houses which has a T-shaped configuration with its arms extending in a longitudinal direction and the leg extended in a radial direction, 30 which key rotates in a longitudinal direction in the two ways around a transverse rotation axis R-R, passing through the "T" leg, a spring being fitted in the leg of said "T" and being disposed between said arms and said oscillating contact carrier (4), so as to impose an 35 oscillation of said contact carrier as a consequence of a rotation of said key, and vice versa, wherein said rod

(63) in a passive position interferes with said arm of said key.

8. The safety switch as claimed in claim 2, wherein in said interference position said contact carriers are
5 mutually separated.

9. The safety switch as claimed in claim 7, wherein the thrust exerted by said spring (64) is stronger than that exerted by said spring (9).

10. The safety switch as claimed in claim 2, wherein
10 said activation means, when said element (6) is in a passive position, activates a signalling and/or alarm device.